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EXAMINER

HICKS, MICHAEL J

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD D. DETTINGER,
THOMAS J. EGGEBRAATEN, and TERRENCE R. O'BRIEN

Appeal 2008-4074
Application 10/733,973
Technology Center 2100

Decided:¹ April 27, 2009

Before LANCE LEONARD BARRY, HOWARD B. BLANKENSHIP,
and ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 CFR § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Data (electronic delivery).

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-12, 15-30, and 32-35. Claims 13, 14, and 31 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

THE INVENTION

The disclosed invention relates in general to data processing. More particularly, the present invention relates to managing execution of a workflow in successive workflow runs. (Spec. 1, Para. 2).

Independent claim 1 is illustrative:

1. A computer-implemented method of execution of a multi-step workflow that is repeatedly executed on data of a database, wherein the workflow is defined by a plurality of steps, each step being an executable function that operates on input from a previous step and produces output for a subsequent step and each step having a defined input format and output format, the method comprising:

receiving current input to a step of the workflow on relevant data of the database, wherein the step has been previously executed on the relevant data using previous input identical to the current input and wherein the previous execution of the step produced previous output;

determining whether the step is deterministic, in that the step generates identical output for given input in repeated executions of the step on the relevant data; and

if the step is deterministic, returning the previous output produced during previous execution of the step without re-executing the step.

THE REFERENCES

The Examiner relies upon the following references as evidence in support of the rejections:

Li	US 6,748,386 B1	June 8, 2004
Crisan	US 2003/0191769 A1	Oct. 9, 2003

THE REJECTIONS

1. The Examiner rejected claims 1-12, 15-28, and 35 under 35 U.S.C. § 102(e), as being unpatentable over Li.
2. The Examiner rejected claims 29, 30, and 32-34 under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Crisan.

FINDINGS OF FACT

In our analysis *infra*, we rely on the following findings of fact (FF) that are supported by a preponderance of the evidence:

Li

1. Li discloses that a URL request is redirected and forwarded to a servlet in the form of an `HttpServletRequest`. (Abstract ll. 7-13)
2. Li discloses that subsequent `HttpServletRequest`s to the application server will result in the retrieval of previously cached query results. Thus, there is no need to issue queries and requests to the database management system (DBMS). (See col. 7, ll. 57-61).

APPELLANTS' CONTENTION

Appellants contend that Li fails to disclose the limitation of determining whether the step is deterministic, in that the step generates an identical output for a given input in repeated executions of the step on the relevant data. (App. Br. 7-8)

EXAMINER'S FINDINGS

The Examiner contends that Li teaches storing the results of a request in a cache. The result is retrieved for subsequent requests without repeating the search unless a data change is detected which could invalidate the saved data in the cache. When the change is detected, the search is performed to update the result. (Ans. 22).

ISSUE

Based upon our review of the administrative record, we have determined that the following issue is dispositive in this appeal:

Have Appellants shown that the Examiner erred in finding that Li discloses determining whether a step within a workflow is deterministic, in that the step generates identical output for a given input in repeated executions of the step on the relevant data?

PRINCIPLES OF LAW

“[T]he examiner bears the initial burden on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Therefore, we look to Appellants’ Briefs to show error in the proffered *prima facie* case.

“Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984). For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. However, this is not an “*ipsissimis verbis*” test. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

ANALYSIS

Claims 1, 10, 15, and 35

As noted above, Appellants contend that the cited references fail to disclose the limitation of determining whether the step is deterministic, in that the step generates identical output for a given input in repeated executions of the step on the relevant data.

We agree.

We find that Li teaches that if a request is made, the result is stored in cache memory. (FF 1-2). However, we find that Li does not disclose

making a determination that a workflow step is deterministic. That is, according to Li, the *output of the step* is not evaluated to determine if it is identical for a given input and repeated executions of the step on the relevant data. We agree with Appellants' assertion that the cited portion of Li discloses that web pages may be stored in a cache or invalidated. (See Reply Br. 3). Thus, we find that Li fails to disclose the limitation of determining whether a workflow step is deterministic. We note that "absence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986).

We further note that each of independent claims 10, 15, and 35 similarly recite the limitation of determining or identifying whether the step is deterministic, in that the step generates an identical output for a given input in repeated executions of the step on the relevant data. Thus, we find that Appellants have shown the Examiner erred in rejecting independent claims 10, 15, and 35 as being anticipated by Li for the same reasons discussed *supra* regarding claim 1. Accordingly, we reverse the Examiner's rejection of independent claims 1, 10, 15, and 35, as well as associated dependent claims 2-9, 11, 12, and 16-23, as being anticipated by Li.

We note that independent claim 24 does not recite the word "deterministic." However, claims 1, 10, 15, and 35, in addition to reciting the term deterministic, provide a definition within each of these claims for the term. Claim 24 recites the same definition, i.e., "wherein the step generates identical output for a given input in repeated executions of the step

on the relevant data.” Thus, for the same reasons discussed *supra* regarding claim 1, we also reverse the Examiner’s rejection of claims 24-28 as being anticipated by Li.

Obviousness rejections of claims 29, 30, and 32-34

We consider next the Examiner’s rejection of claims 29, 30, and 32-34 as being unpatentable over Li and Crisan.

We note that independent claims 29, 30, and 32 are similar to claim 1, in that each of these claims recites in equivalent form the limitation of determining or identifying whether a step or module is deterministic, in that the step generates identical output for given input in repeated executions of the step on the relevant data. We do not find, nor has the Examiner established, that Crisan cures the deficiencies of Li which we have discussed *supra* regarding claim 1. Accordingly, we reverse the Examiner’s § 103(a) rejection of claims 29, 30, and 32-34 over Li and Crisan.

CONCLUSION

Appellants have established that the Examiner erred in determining that Li discloses determining whether the step is deterministic, in that the step generates an identical output for a given input in repeated executions of the step on the relevant data.

Appellants have established that the Examiner erred in rejecting claims 1-12, 15-28, and 35 as being anticipated by Li.

Appellants have established that the Examiner erred in rejecting claims 29, 30, and 32-34 as being unpatentable over Li and Crisan.

DECISION

We reverse the decision of the Examiner rejecting claims 1-12, 15-28, and 35 under 35 U.S.C. § 102(e).

We reverse the decision of the Examiner rejecting claims 29, 30, and 32-34 under 35 U.S.C. § 103(a).

REVERSED

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